

WHAT IS CLAIMED IS:

1. A treatment on a silicon oxynitride, which is applicable to a surface of a silicon oxynitride layer covered by a photo resist layer, the treatment comprising the steps of :

5           using oxygen plasma to remove a majority of the photo resist layer; and  
            using non-oxygen plasma to overetch in order to remove a residual of the photo resist layer.

2. The method to treat a silicon oxynitride surface according to claim 1, wherein the non-oxygen plasma includes inert gas plasma.

10           3. The method to treat a silicon oxynitride surface according to claim 2, wherein the non-oxygen plasma includes argon plasma

4. The method to treat a silicon oxynitride surface according to claim 1, wherein a duration of the overetch is approximately 20% to 25% of a duration of the oxygen plasma process.

15           5. A method to remove a silicon oxide material, wherein the silicon oxide material is resulted from a reaction between silicon containing materials and oxygen plasma, and the method in removing the silicon oxide material comprising:

            an ion bombardment method using inert gas plasma to treat the silicon oxide material.

20           6. The method to remove a silicon oxide material according to claim 5, wherein the inert gas plasma includes argon gas plasma.

7. A method to remove a photo resist layer, which is applicable to a photo resist layer covering a silicon oxynitride layer, the method to remove the photo resist layer comprising the steps of :

using oxygen plasma to remove a majority of the photo resist layer; and

using non-oxygen plasma to remove a residual of the photo resist layer.

8. The method to remove the photo resist layer according to claim 7, wherein the non-oxygen plasma includes inert gas plasma.

5 9. The method to remove the photo resist layer according to claim 8, wherein the inert gas plasma includes argon plasma.

10. The method to remove the photo resist layer according to claim 7, wherein a duration required for a removal of a residual of the photo resist layer is approximately 20 to 25% of a duration required for a removal of a majority of the photo resist layer.